Application No. 10/056,999

much easier, and satisfactory transmission characteristics can be realized at high speed and large capacity WDM transmission.

In the Drawings

Please delete Fig. 2 of the Drawings and replace it with the amended Fig. 2 enclosed herewith.

In the Abstract of the Disclosure

Please delete the Abstract of the Disclosure and add a new Abstract of the Disclosure enclosed herewith.

In the Claims

Please amend Claim 1 and add new Claims 4, 5 and 6, to read as follows. Unchanged Claims 2 and 3 are included for the Examiners reference convenience.

1.(amended) An optical fiber transmission line comprising a plurality of local dispersion compensating spans, wide dispersion compensating spans disposed at predetermined intervals, and optical repeating amplifiers to connect each span;

wherein the local dispersion compensating span includes a first optical fiber with positive dispersion having an effective core area of $130\,\mu\text{m}^2$ or more and a second optical fiber with a negative dispersion value of -50 ps/nm/km or less to transmit an optical signal output from the first optical fiber; and

wherein the wide dispersion compensating span includes a third optical fiber having the same configuration and composition as the first optical fiber.

2.(unchanged) The optical fiber transmission line of claim 1 wherein the distance of the wide dispersion compensating span is substantially equal to that of the local dispersion compensating span.

3.(unchanged) The optical fiber transmission line of claim 1 wherein the average chromatic dispersion of the local dispersion compensating spans after the dispersion compensation by the second optical fiber is between '4 ps/nm/km and '1 ps/nm/km.

Application No. 10/056,999

4.(new) A method of flattening chromatic dispersion in an optical fiber transmission line comprising providing a plurality of serially repeating wide area optical fiber transmission line compensating spans for transmitting an optical signal, each serially repeating wide area optical fiber transmission line compensating span including:

a plurality of serially repeating local dispersion compensating spans, each local dispersion compensating span being formed by:

providing a first optical amplifier;

coupling a first optical fiber to the first optical amplifier, the first optical fiber having a positive dispersion and an effective core area of 130 μ m² or more; and

coupling a second optical fiber to the first optical fiber, the second optical fiber having a negative dispersion value of -50 ps/nm/km or less; and

a wide dispersion compensating span disposed serially after the plurality of serially repeating local dispersion compensating spans, each wide dispersion compensating span being formed by:

providing a second optical amplifier; and

coupling a third optical fiber to the second optical amplifier, the third optical fiber having the same configuration and composition as the first optical fiber.

5.(new) The method of flattening chromatic dispersion in an optical fiber transmission line of claim 4, wherein the distance of the wide dispersion compensating span is substantially equal to that of the local dispersion compensating span.

6.(new) The method of flattening chromatic dispersion in an optical fiber transmission line of claim 4, wherein the average chromatic dispersion of the local dispersion compensating spans after the dispersion compensation by the second optical fiber is between -4 ps/nm/km and -1 ps/nm/km.

REMARKS

The Applicants have amended the Specification to correct grammatical errors.

The Applicants have deleted the current Abstract of the Disclosure and enclose herewith a new Abstract of the Disclosure.